DATE: August 18, 2004

TO: CPR Commission.
1400 10th Street
Sacramento, CA 95814

SUBJECT: CPR Hearings Testimony

Dear Commissioners,

This letter is to express interest in testifying in CPR Commission hearings.

While much of my feedback primarily concerns recommendations on Health and Human Services, I will only be able to attend San Jose hearing on August 27th. However, my comments are highly relevant to the technology and procurement matters.

Attached is a letter to Sandra Shewry, Director of the Department of Health Services that summarizes my recommendations on HHS28 (Medi-Cal Smart Card) and relevant topics. I would like to further highlight some of these comments as they apply to technology and procurement:

- Medi-Cal Smart Card should be used not only for fraud prevention, but also for improving the quality of care
- Project timeline and governance proposed in HHS28 should be revised to gather feedback from stakeholders earlier on
- DHS should take a more cautious stance towards biometrics, since potential technology issues may disrupt services
- It is important to develop technology standards through an open process with broad involvement of the stakeholders
- Medi-Cal Smart Card initiative should be designed as a comprehensive e-Health platform from the beginning

I would like to hear from CPR Commission staff regarding the process and logistics for oral testimony at August 27th hearing.

Sincerely,

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DATE: August 17, 2004

TO: Sandra Shewry, M.P.H., M.S.W.
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CC: California State Senate, Health and Human Services Committee
California State Assembly, Committee on Health

SUBJECT: CPR Report Feedback: Medi-Cal Smart Card

Dear Ms. Shewry,

Thank you for the invitation to submit feedback on the CPR Report. My comments refer to the proposed adoption of Smart Card technology for Medi-Cal, as described in the recommendation **HHS28** and potentially synergistic recommendations in **Item 6**.

I am glad that CPR Report is endorsing a Medi-Cal Smart Card. Aquave Group has been advocating Smart Card adoption by Medi-Cal in our written feedback submitted to Medi-Cal Redesign Workgroups earlier this year. It was also a pleasure to discuss this technology with you face to face during meetings of the Workgroups in April.

While the current CPR Report is an excellent start, there are a number of areas where its recommendations may be clarified and improved to further the objectives underlying the Review effort. Our comments can be grouped into the following areas:

1. PROGRAM CHARTER

HHS28 offers an innovative way to prevent Medi-Cal fraud, before it occurs and therefore has great potential to save California significant costs. This alone may be compelling enough to justify the program. However, to overlook other benefits of Smart Card implementation would be to miss the mark in putting the people first.

Out of all references cited, the CPR recommendation appears to very closely mirror Texas Medicaid Integrity Pilot. While Texas lessons, as preliminary as they may be, would help California with defining fraud prevention case, other public health smart card projects should provide a model for achieving ancillary public health benefits. If the State is to undertake the effort to put Medi-Cal on a Smart Card, it would be wasteful to pass by the opportunity to improve the **quality of services**.

Therefore we should not be merely duplicating Texas approach, but using it as a template to build upon, accounting for the requirements, differences and imperatives, unique to California. Specific suggestions are listed in **Item 5**.

2. PROGRAM GOVERNANCE

CPR Report includes very scant information regarding proposed governance of a Medi-Cal Smart Card program. Appropriate involvement of relevant stakeholders early on will be critical to program adoption and consequently its success. Therefore it needs to be defined without delay.

Some of the biggest questions are raised by **HHS28-G** recommendation suggesting that stakeholder input should be solicited only after awarding a contract to a vendor. This implies that system requirements, selection criteria and vendor procurement will be accomplished without any public input. This raises a real risk of ignoring the needs of California provider and beneficiary communities in the process and may only be possible if vendor is selected through the use of Texas criteria, without accounting for any unique California differences.

The report talks about selecting "a vendor", which may be interpreted as "a single vendor". However, since choosing a technology vendor inevitably means selection of an implementation approach, making a definitive single-vendor commitment early on will limit the options available to the State and to the public. California would be wise to follow Texas example of awarding multiple (four) pilot contracts in geographically diverse counties to be able to evaluate and compare approaches. Simply selecting one vendor based on Texas pilot outcome will limit the program's potential to improve the quality of health services.

A greater voice should be given to local government entities. Medi-Cal Smart Card would provide an excellent opportunity to store and track the information about county specific health programs, related to both benefits and services. Public health facilities may be further able to benefit by streamlining their patient admission processes with the use of a Smart Card. For these benefits to be realized, a closer coordination will be necessary from early on.

DHS should establish a **Medi-Cal Smart Card Taskforce**, within the proposed Medi-Cal Workgroups, to solicit input from all relevant stakeholders on program direction, design and governance. This should be done before finalizing program charter and approach, and before drafting the proposed modifications of California Welfare and Institutions Code for legislative action.

3. BIOMETRICS CHALLENGES

CPR Report seems to imply that biometrics should be a necessary part of the program. While use of biometrics holds a potential to improve the accuracy of beneficiary verification, it poses some of the unique challenges that should be evaluated and considered very carefully.

While Smart Card technology had over 30 years to mature and a number of well established standards exist[1] to minimize the implementation risks, this is hardly a case with biometrics. Recent GAO report, titled "Challenges in Using Biometrics" [2] discusses the issues arising in the course of using biometrics for public sector

applications. The report discusses biometric technology, its applications and limitations, advising caution in choosing the right approach to manage the technology and project risks.

According to GAO report, there is a significant difference between identification and verification biometric technologies. Identification involves matching biometric template of a person against a database of templates for a possible match ("positive identification") or lack thereof ("negative identification"). Verification, on the other hand, involves a 1:1 match between acquired and stored templates to verify if a person is who they say they are.

Accuracy of a biometric match is a significant issue in evaluating applicability of biometric to a particular scenario. False match rate (FMR) refers to likelihood of wrongly matched identities. False non-match rate (FNMR) refers to likelihood of not matching correct identity with a template. Failure to enroll rate (FTER) refers to likelihood of inability to acquire biometric template to enroll a person. GAO report on the use of biometrics for border security[3] cites typical accuracy of fingerprint biometrics (p.69) as 0.2-36% FNMR and 0-8% FMR.

In systems requiring verification, such as Medicaid Fraud Prevention, biometrics limitations may lead to a number of highly unpleasant scenarios. For example if a new enrollee is falsely matched with a person previously enrolled in the program under another identify, the applicant may be denied benefits. Or if an enrollee cuts a finger, he or she will not be able to verify their identity, and may be denied treatment. CPR Report already cites some of the potential pitfalls, for example problems with enrolling children and seniors. Further anecdotal evidence suggests that some of problems with biometrics happen when they are the least expected. For example fingerprint biometric is nearly unusable by US military in Kuwait[4], since the climate and sand leads to wearing out of fingerprint patterns.

Out of all public health smart card implementations cited in CPR Report, Texas Medicaid Integrity Pilot is the only project utilizing a biometric. Most of the successful biometric implementations have been in law enforcement, relying on identification, rather than verification, where error tolerance is much greater. At present there is no data about the accuracy of various biometrics technologies in a public health environment and their impact on delivery of health services.

DHS should not make biometric a centerpiece of Medi-Cal Smart Card initiative and should wait for better technology standards to emerge and mature[5]. A premature choice of biometric algorithm, tied to a specific smart card will likely lead to an expensive near-total replacement in the close future. On the other hand, simple use of cardholder PIN should help deter many of the common fraud scenarios.

4. TECHNOLOGY INFRASTRUCTURE

Implementing a statewide Medi-Cal Smart Card system will require unprecedented coordination between stakeholders. This cooperation will either be enhanced by vendor-neutral technology standards, or hindered by the lack thereof.

Texas pilot has been facilitated by development of a WIC Smart Card Interoperability Specification (WSC-IS)[6], to coordinate benefit transfer between benefit plans, providers and grocers. The standard has been a result of collaborative development between government, healthcare, retail and technology vendor representatives.

California should adopt a similar standard, and extend it as needed, to accommodate unique requirements, especially as related to enhancing quality of public health services (**Item 5**). Specifically, this may include harmonization with other relevant standards, for example G-8 Healthcard[7], used in Europe for emergency medical records, as well as development of new standards, for example for e-Prescribing.

The standards and requirements should be developed in a similar collaboration of all relevant stakeholders, **before** implementation vendors are selected.

5. E-HEALTH PUBLIC SERVICES

There are a number of ways the public health and quality of care may be enhanced, using Medi-Cal Smart Card as a platform. While CPR Report mentions some of the possible applications, it does not make a definitive recommendation to implement any of them, except identity verification. A brief list of Smart Card based services, with potential for the greatest impact are listed below:

5.1) Emergency Medical Services

Placing beneficiary emergency medical information on a card has a potential to reduce the time it takes to retrieve the information vital to emergency treatment, potentially saving lives[8]. Advance directives may be included to let patient provide special treatment instructions. This will require outfitting ambulances with smart card readers and software.

5.2) E-Prescribing and Patient Safety

Medical errors arising from using paper prescriptions and physician orders can be significantly reduced by making the process electronic. Smart Card is an ideal vehicle for entering electronic physician orders, and can provide documented audit trail. Utility of portable medical records can be increased further by implementing automatic verification and alerting of drug-drug, drug-allergy and other interactions.

5.3) Prevention & Chronic Care Services

Chronic and preventative care requires tracking patient long-term treatment plans over a significant period of time. Smart Card can be used to store long-term medical history and treatment information for conditions, such as diabetes, asthma, heart diseases and others. Accurate and timely information in the hands of clinicians can help preventative and chronic care and decrease long term costs.

5.4) Anti-Fraud and Financial Enhancements

Beyond basic identity verification, there are a number of additional applications that have potential to improve financial condition of Medi-Cal program. Formulary

verification will allow verifying electronic prescription against Medi-Cal approved drug list, as well as help submit timely reports for collecting manufacturer rebates. TAR processing may be streamlined by integrating patient identity with clinical and administrative data from Smart Card. Further EBT functions may be integrated.

5.5) Provider Network Management

Smart Card may be used to store information about the provider networks authorized for a particular group of beneficiaries, and helping enforce and verify network compliance, while allowing expedited processing to result in administrative savings for providers.

California should seize the opportunity of using Medi-Cal Smart Card to enhance its e-health infrastructure. Appropriate planning should be done early in the program conception to develop necessary standards and include appropriate functionality.

6. SYNERGISTIC RECOMMENDATIONS

Broadening Medi-Cal Smart Card program to include the service enhancements from **Item 5** may prompt minor adjustments of some other CPR recommendations. Following is the list of recommendations, which may be synergistic with expanding use of Smart Cards in Medi-Cal

SO70: Taking Steps to Contain State Drug Costs

Use of Smart Cards for automated drug rebate collection.

HHS11: Use Technology to Promote Ease of Use and Improve Efficiency in the Women, Infants and Children Supplemental Nutrition Program

WIC program should use the same Smart Card as Medi-Cal, to deliver formerly mentioned benefits.

HHS16: Protect California's Children by Implementing a Statewide Online Immunization Registry

Immunization information should be present on a Medi-Cal Smart Card, along with other emergency information.

HHS27: Automate Identification of Other Health Coverage for Medi-Cal Beneficiaries

OHC information should be stored on Medi-Cal Smart Cards and used for TAR processing and correct billing, to maximize OHC use.

HHS30: Centralize Medi-Cal Treatment Authorization Process

Integrate TAR processing with Smart Card verification and online data submission.

DHS should take steps to harmonize Medi-Cal Smart Card use with the potentially synergistic recommendations.

In conclusion, I would like to summarize my feedback by suggesting that DHS develop a long-term strategy and vision for a Smart Card program that will not only reduce fraud, waste and abuse, but also help improve the quality of public health services. Following is the summary of our feedback:

Recommendations:

A. **Broaden the Charter of Medi-Cal Smart Card from only improving Medi-Cal Integrity, to include enhancement of public health services.**

B. **Establish Medi-Cal Smart Card Taskforce within the framework of Medi-Cal Workgroups. Solicit input from relevant stakeholders on program design.**

C. **Do not make biometrics the centerpiece of Medi-Cal Smart Card initiative, use PIN verification instead. Wait for technology and standards to emerge and mature, before deploying biometrics.**

D. **Develop interoperable standards for California Medi-Cal Smart Card, based on extending existing standards (WSC-IS, G-8, etc).**

E. **Develop Medi-Cal Smart Card initiative as an e-health platform to improve the quality of care, specifically by using Smart Card to enhance emergency services, patient safety, prevention and chronic care, e-prescribing and provider network integration.**

F. **Harmonize with synergistic recommendations, whenever appropriate.**

I am available for further assistance in case you would like to have further discussion of our feedback and recommendations.

Sincerely,

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References:

[1] US General Services Administration, "Smart Card Standards and Interoperability" http://www.estrategy.gov/smartgov/smart_card.cfm

[2] GAO Report, Sept. 9, 2003, "Challenges in Using Biometrics" http://www.gao.gov/docsearch/abstract.php?rptno=GAO-03-1137T

[3] GAO Report, Nov 14, 2002, "Technology Assessment: Using Biometrics for Border Security" http://www.gao.gov/docdblite/summary.php?recflag=&accno=A05491&rptno=GAO-03-174

[4] Bill Boggess, Chief, US DoD Authentication Programs, speech at JavaOne 2003

[5] NIST Biometrics Resource Center, http://www.itl.nist.gov/div893/biometrics/

[6] US Department of Agriculture, http://www.fns.usda.gov/wic/EBT/wicsmartcardinterop.htm

[7] G-8 HealthCard Data Card Project, http://www1.va.gov/card/

[8] International Herald Tribune, "EU proposes health card to facilitate cross-border work" http://www.iht.com/articles/48064.html